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FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 19:12:45 ON 19 SEP
2002

L1 23794 S CARDIOMYOCYTE
L2 276418 S CORONARY(W) (ARTERY OR SINUS)
L3 6372 S AAV OR ADENO-ASSOCIATED(3A) VECTOR
L4 5 S L1 AND L2 AND L3
L5 3 DUP REM L4 (2 DUPLICATES REMOVED)

=> d bib ab 1-3 15

L5 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2002:263208 BIOSIS
DN PREV200200263208
TI Localized delivery of **adeno-associated** virus
vector expressing human extracellular superoxide dismutase gene
confers long term protection against ischemia-reperfusion injury to the
rat heart.
AU Agrawal, Reitu S. (1); Muangman, Suphichaya; Melo, Luis G.; Layne,
Matthew
D.; Lopez-Illasaca, Marco; Perrella, Mark A.; Lee, Richard T.; Zhang,
Lunan; Dzau, Victor J.
CS (1) Brigham and Women's Hosp, Boston, MA USA
SO Circulation, (October 23, 2001) Vol. 104, No. 17 Supplement, pp. II.36.
<http://circ.ahajournals.org/>. print.
Meeting Info.: Scientific Sessions 2001 of the American Heart Association
Anaheim, California, USA November 11-14, 2001
ISSN: 0009-7322.
DT Conference
LA English

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 2000:456818 CAPLUS
DN 133:53712
TI Efficient and stable in vivo gene transfer to **cardiomyocytes**
using recombinant **adeno-associated** virus
vectors
IN Leiden, Jeffrey M.; Svensson, Eric
PA Arch Development Corp., USA
SO PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000038518	A1	20000706	WO 1999-US31093	19991228
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

EP 1139751 A1 20011010 EP 1999-967703 19991228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRAI US 1998-113923P P 19981228
WO 1999-US31093 W 19991228

AB Recombinant **adeno-assocd.** virus (rAAV) **vectors** are used to transduce **cardiomyocytes** in vivo by infusing the rAAV into a **coronary artery or coronary sinus**. RAAV infection is not assocd. with detectable myocardial inflammation or myocyte necrosis. Thus, rAAV is a useful vector for the stable expression of therapeutic genes in the myocardium and can be used to deliver genes for inducing angiogenesis, inhibiting angiogenesis, stimulating cell proliferation, inhibiting cell proliferation and/or treating or ameliorating other cardiovascular conditions.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 3 MEDLINE DUPLICATE 1
AN 1999110721 MEDLINE
DN 99110721 PubMed ID: 9892583
TI Efficient and stable transduction of **cardiomyocytes** after intramyocardial injection or intracoronary perfusion with recombinant **adeno-associated virus vectors**.
AU Svensson E C; Marshall D J; Woodard K; Lin H; Jiang F; Chu L; Leiden J M
CS Departments of Medicine and Pathology, University of Chicago, Chicago, IL 60637, USA.
NC AR-42885 (NIAMS)
DK-48987 (NIDDK)
HL-54592 (NHLBI)
SO CIRCULATION, (1999 Jan 19) 99 (2) 201-5.
Journal code: 0147763. ISSN: 1524-4539.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199902
ED Entered STN: 19990311
Last Updated on STN: 20010521
Entered Medline: 19990223
AB BACKGROUND: The delivery of recombinant genes to **cardiomyocytes** holds promise for the treatment of a variety of cardiovascular diseases. Previous gene transfer approaches that used direct injection of plasmid DNA or replication-defective adenovirus vectors have been limited by low transduction frequencies and transient transgene expression due to immune responses, respectively. In this report, we have tested the feasibility of using intramyocardial injection or intracoronary infusions of recombinant **adeno-associated virus (rAAV) vectors** to program transgene expression in murine **cardiomyocytes** in vivo.
METHODS AND RESULTS: We constructed an rAAV containing the LacZ gene under the transcriptional control of the cytomegalovirus (CMV) promoter (AAVCMV-LacZ). We then injected 1×10^8 infectious units (IU) of this virus into the left ventricular myocardium of adult CD-1 mice. Control hearts were injected with the AdCMV-LacZ adenovirus vector. Hearts harvested 2, 4, and 8 weeks after AAVCMV-LacZ injection demonstrated stable beta-galactosidase (beta-gal) expression in large numbers of **cardiomyocytes** without evidence of myocardial inflammation or myocyte necrosis. In contrast, the AdCMV-LacZ-injected hearts displayed transient beta-gal expression, which was undetectable by 4 weeks after

injection. Explanted C57BL/6 mouse hearts were also perfused via the **coronary arteries** with 1.5×10^9 IU of AAVCMV-LacZ and assayed 2, 4, and 8 weeks later for beta-gal expression. beta-Gal expression was detected in <1% of **cardiomyocytes** at 2 weeks after perfusion but was detected in up to 50% of **cardiomyocytes** 4 to 8 weeks after perfusion. CONCLUSIONS: Direct intramyocardial injection or **coronary artery** perfusion with rAAV vectors can be used to program stable transgene expression in **cardiomyocytes** in vivo. rAAV appears to represent a useful vector for the delivery of therapeutic genes to the myocardium.

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<u>L4</u>	l1 and l2 and l3	38	<u>L4</u>
<u>L3</u>	aav or adeno-associated near3 vector	2182	<u>L3</u>
<u>L2</u>	coronary adj (artery or sinus)	12488	<u>L2</u>
<u>L1</u>	cardiomyocyte	530	<u>L1</u>

END OF SEARCH HISTORY

Search Results - Record(s) 1 through 20 of 30 returned.

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10. [20020068319](#). 08 Mar 01. 06 Jun 02. 32 human secreted proteins. Ni, Jian, et al. 435/69.1; 435/183 435/325 435/7.1 530/388.1 536/23.5 C12P021/02 C12N005/06 G01N033/53 C07H021/04 C12N009/00.

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